WHAT IS CLAIMED IS:

1. A method for encapsulating an optoelectronic device, comprising the steps of:

providing a device die on a substrate, said device die including an optoelectronic device thereon;

forming a volume of fluid encapsulant material over said optoelectronic device;

shaping said volume of fluid encapsulant material into a shaped encapsulant covering said optoelectronic device by referencing at least one of said device die and said optoelectronic device; and

curing said shaped encapsulant thereby forming a cured encapsulant.

2. The method as in claim 1, further comprising the step of positioning an end face of an optical transmission medium in confronting relation with said cured encapsulant, thereby butt-coupling said optoelectronic device to said optical transmission medium.

3. The method as in claim 1, in which said step of shaping includes shaping said volume of fluid encapsulant material into a substantially solid encapsulant and said step of curing comprises hardening said substantially solid encapsulant.

4. The method as in claim 1, in which said step of curing includes solidifying said shaped encapsulant.

5. The method as in claim 1, in which said step of providing includes said substrate having mechanical guides extending therefrom, and said step of shaping includes guiding a molding tool along said mechanical guides to an alignment position, said molding tool configured to shape said volume of fluid encapsulant material into said shaped encapsulant when in said alignment position.

6. The method as in claim 5, in which said step of shaping includes providing said molding tool including cavities therein, said cavities capable of receiving said

mechanical guides therein, and said step of guiding includes sliding said molding tool such that said mechanical guides are received within said cavities.

7. The method as in claim 5, in which said step of shaping includes guiding said molding tool along said mechanical guides until a relief feature of said molding tool contacts said device die.

8. The method as in claim 2, in which said step of providing includes said substrate having mechanical guides extending therefrom, and said optical transmission medium is retained within a ferrule connector, said ferrule connector including cavities therein capable of receiving said mechanical guides, and said step of positioning includes translating said ferrule connector with respect to said optoelectronic device such that said mechanical guides are received within said cavities, and ceasing said translation when said ferrule connector contacts said cured encapsulant, said cured encapsulant acting as a mechanical stop.

9. The method as in claim 1, in which said step of shaping includes said shaped encapsulant encasing said optoelectronic device.

10. The method as in claim 1, in which said step of shaping includes said shaped encapsulant being an angled wedge having an upper surface being oblique to a substrate surface of said substrate.

11. The method as in claim 10, wherein said optoelectronic device emits light substantially normal to said substrate surface, and further comprising the steps of:

providing an optical transmission medium secured within a ferrule connector and including an end face angled obliquely with respect to an axis of said optical transmission medium; and

positioning said obliquely angled end face parallel to said upper surface of said angled wedge such that an axis of said optical transmission medium is positioned substantially normal to said substrate surface and said end face is in confronting relation with said upper surface.

12. The method as in claim 10, in which said step of shaping includes said upper surface having a recessed portion therein and a peripheral portion, and further comprising the steps of providing an optical transmission medium retained within a ferrule, and positioning an end surface of said ferrule in contact with said peripheral portion.

13. The method as in claim 2, in which said step of positioning includes positioning said optical transmission medium to form a conterminous interface with said cured encapsulant.

14. The method as in claim 1, in which said substrate includes mechanical guides extending therefrom and said step of providing includes positioning said optoelectronic device on said substrate using a placement tool, said placement tool being guided into position using said mechanical guides, thereby aligning said optoelectronic device with respect to said substrate and said mechanical guides.

15. The method as in claim 2, in which said step of providing includes said substrate having mechanical guides extending therefrom and said step of shaping includes aligning a molding tool with respect to said optoelectronic device using said mechanical guides and said step of positioning includes positioning said optical transmission medium with respect to said optoelectronic device using said mechanical guides.

16. The method as in claim 1, wherein said step of forming comprises forming one of an epoxy, a curing gel and a transparent polymer over said optoelectronic device.

17. A method for coupling an optical transmission medium to an optoelectronic device, comprising the steps of:

providing an optoelectronic device on a device die on a substrate;

forming a volume of fluid encapsulant material over said optoelectronic device;

shaping said volume of fluid encapsulant material into a shaped encapsulant encasing said optoelectronic device by positioning a molding tool in an alignment position with respect to said device die using vision-based alignment techniques;

curing said shaped encapsulant, thereby hardening said shaped encapsulant; and

positioning an end face of an optical transmission medium in confronting relation with said hardened encapsulant, thereby butt-coupling said optoelectronic device to said optical transmission medium.

18. An optical subassembly comprising:

an optoelectronic device formed on an upper planar surface of a device substrate, said device substrate mounted on a mounting substrate,

an encapsulant formed over said optoelectronic device and having a top surface, and

an optical transmission medium secured within an optical ferrule having an end surface in confronting relation with said top surface and configured generally perpendicular to said upper planar surface.

19. The optical subassembly as in claim 18, wherein said top surface of said encapsulant is oblique with respect to said upper planar surface and said end surface is oblique to an axis of said optical transmission medium, said top surface and said end surface forming a substantially conterminous interface.

20. The optical subassembly as in claim 18, in which said encapsulant encases said optoelectronic device and further including a wire bond formed on said upper planar surface and coupling said optoelectronic device to a further component, said encapsulant further encasing said wire bond, and said encapsulant having a first thickness over said optoelectronic device and a second thickness being greater than said first thickness in a region proximate to said wire bond.

21. The optical subassembly as in claim 18, wherein said optoelectronic device comprises a VCSEL (vertical cavity surface emitting laser).

22. The optical subassembly as in claim 18, wherein said encapsulant comprises an angled wedge and said optical transmission medium includes an end face being substantially parallel to said top surface.

23. The optical subassembly as in claim 18, wherein said encapsulant includes a recessed portion over said optoelectronic device and a peripheral portion, said end surface and said peripheral portion forming a substantially conterminous interface.

24. The optical subassembly as in claim 23, in which said recessed portion is essentially parallel to said top surface.

25. The optical subassembly as in claim 18, wherein said encapsulant comprises one of a plastic, an epoxy, a curing gel, and a transparent polymer.

26. The optical subassembly as in claim 18, in which said encapsulant includes a thickness over said optoelectronic device being no greater than 35 micrometers.

27. The optical subassembly as in claim 18, wherein said optoelectronic device comprises a monitor photodiode.

28. An optical subassembly comprising:

a device die including an array of optoelectronic devices thereon, said device die mounted on a mounting substrate and including an upper planar surface, and an encapsulant encasing said device die and having a top surface which is obliquely angled with respect to said upper planar surface, and

a corresponding array of optical fibers secured within an optical ferrule having an end face in confronting relation with said top surface and obliquely angled with respect to axes of said optical fibers, each of said optical fibers configured generally perpendicular to said upper planar surface.

29. The optical subassembly as in claim 28, in which each of said optoelectronic devices comprises a single mode VCSEL (vertical cavity surface emitting lasers) that emits light having a wavelength of about 1310 nm, said optical fibers each comprise a single mode fiber, and said encapsulant includes a thickness over said optoelectronic devices being no greater than about 35 micrometers.